

NORTH PACIFIC OCEAN, APRIL 1935

By WILLIS E. HURD

Atmospheric pressure.—The average pressure situation over the North Pacific Ocean during April 1935, showed a fairly well developed low-pressure belt overlying southwestern Alaskan waters and the neighborhood of the Aleutian Islands; a high-pressure belt extending from southeastern Alaska southward to middle latitudes and thence westward into east longitudes, with the crest near Midway Island; and a shallow tropical low-pressure belt, which was of pronounced depth over the southwestern part of the ocean.

Pressures were decidedly above the normal in the northern Pacific, where strong anticyclones prevailed early and late in the month, and below the normal in waters of California and in the tropics.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, April 1935, at selected stations

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Point Barrow.....	30.30	+0.21	30.86	12	29.94	23
Dutch Harbor.....	29.85	+ .07	30.60	26	28.84	15
St. Paul.....	29.97	+ .18	30.86	27	29.14	15
Kodiak.....	29.83	+ .08	30.66	27	28.90	16
Juneau.....	29.99	+ .03	30.70	26	29.32	18
Tatoosh Island.....	30.00	.00	30.43	25	29.47	22
San Francisco.....	29.97	— .08	30.22	6	29.44	7
Mazatlan.....	29.87	— .02	29.96	2	29.80	12
Honolulu.....	30.06	.00	30.14	28	29.91	1
Midway Island.....	30.13	+ .01	30.30	7, 16	29.84	28
Guam.....	29.81	— .08	29.86	21	29.76	28
Manila.....	29.79	— .03	29.84	1, 15, 16, 20, 21, 22	29.72	5, 6
Hong Kong.....	29.83	-----	30.07	1	29.67	9
Naha.....	29.90	— .02	30.12	1	29.74	28
Chichishima.....	29.97	.00	30.14	3	29.68	19
Nemuro.....	29.94	-----	30.36	8	28.92	30

NOTE.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observation.

Cyclones and gales.—Storm conditions decreased materially over the North Pacific from March to April. No deep cyclones entered the western part of the ocean from Asia until the end of the month, when a storm with pressure readings below 29 inches crossed northern Japan on the 30th, accompanied by a strong gale on the south coast of Hokushu. Several cyclones of moderate intensity in immediate Japanese waters developed considerably in strength over the ocean in their passage toward Aleutian waters. This was particularly true of the Hokushu Low of April 5, which caused fresh to strong gales to the eastward on the 6th, and a gale of force 11 near 48° N. 163° E., on the 7th. Another depression, which left Japan on the 11th, caused fresh to strong gales as far to the eastward as 165° E. on the 12th to 14th.

Gales to the southward of the Aleutian Islands, between 40° and 50° N. 170° E. and 150° W., resulted from the activities of the great low-pressure system in these waters. On several days scattered gales in this region did not exceed 8 in force, but on the 3d, 4th, 16th, 18th, 21st, 22d, 23d, and 29th, forces of 9 to 10, likewise scattered as to distribution, occurred.

On the 22d the severest extra-tropical gale of the month, of force 12 from the east, was reported by the British steamship *Tymeric* near latitude 47° N. longitude 172° W. This ship encountered much rough weather on the 21st–23d, during an eastbound voyage to Portland, and was forced on several occasions to heave to on account of the

strong winds and high seas. Her lowest corrected barometer on the 22d was 28.83 inches, which, with an identical reading reported by the Japanese motorship *Tokai Maru* near 44° N. 166° E. on the 2d, was the lowest pressure reading of the month outside of the tropics. The lowest land reading in high latitudes was 28.84 inches, at Dutch Harbor on the 15th.

Between 150° W. and the American coast few gales occurred and these principally in connection with moderate disturbances on the California-Hawaiian routes during the early half of the month.

Typhoon.—One small typhoon crossed the Philippines early in the month, causing considerable loss of life and property damage on the island of Samar. The lowest pressure reported was 27.97 inches, accompanied by hurricane winds, at Borongan. A history of the disturbance will be found in the subjoined report by the Rev. B. F. Doucette.

Tehuantepecer.—On the 13th a norther gale, force 10, was encountered by the American steamer *Kentuckian* in the Gulf of Tehuantepec. In an observation from Vera Cruz, on the Mexican east coast, a north gale of force 9 was reported on the same date.

Fog.—Along most of the American coast fog increased materially from March to April. It occurred on 10 days between Cape Blanco and Point Conception, and on 6 days between San Diego and Cape Corrientes. Occasional fog was met with along the northern steamship routes, with the region of greatest frequency—2 or 3 days in each 5° square—between 165° E. and the northern half of the Japanese coast.

TYPHOON OVER THE FAR EAST, APRIL 1–9, 1935

BERNARD F. DOUCETTE, S. J.

[Weather Bureau, Manila, P. I.]

In the early part of April 1935 a small yet intense typhoon appeared over the Western Caroline Islands and moved toward the Philippines. It passed over the Island of Samar, leaving a narrow path in which severe destruction was experienced, and moved on a northwest course to Central Luzon, weakening as it crossed this island on its way to the China Sea. As the barometric minimum at Borongan showed, the typhoon was well developed and very deep, although small in area.

The approximate positions determined after data from ships had been copied and complete records had been received from stations along the course of the typhoon, are given below.

April 1, 2 p. m.	About 200 miles ESE. of Yap	
	Latitude	Longitude
April 2, 6 a. m.	10	139
April 3, 6 a. m.	11	30 135
April 4, 6 a. m.	12	30 131 30
April 5, 6 a. m.	13	00 130
April 6, 6 a. m.	11	30 125 30
April 7, 6 a. m.	13	30 122 10
April 8, 6 a. m.	16	30 119
April 9, 6 a. m.	20	00 119

Forming ESE. of Yap, the typhoon moved WNW. for 3 days, decreasing its speed as it proceeded. It began to move more rapidly during the night of April 5, inclining to the WSW. The morning of the 6th found it over the Island of Samar, between Borongan and Guiuan, two stations on the eastern coast, and very close to the former station. It now changed to a NW. course, passing over Catbalogan and Calbayog, two stations on the western coast of Samar, the calm area being experienced at Catbalogan. Over the western portion of San Bernardino